

# IRON AGE

## FARM, GARDEN AND ORCHARD TOOLS

AMERICAN FACTORY  
ESTABLISHED 1888

BATEMAN MFG CO.  
GRENLOCH, NEW JERSEY

CANADIAN FACTORY  
ESTABLISHED 1902

The BATEMAN-WILKINSON CO., Limited  
TORONTO, ONTARIO

TOOLS ARE CARRIED IN STOCK AT CENTERS OF DISTRIBUTION.  
LARGEST STOCKS OF SUITABLE TOOLS FOR EACH VICINITY ARE  
CARRIED BY THE BEST CLASS OF IMPLEMENT AND HARDWARE  
DEALERS IN THE COUNTRY.

# 100 PER CENT POTATO PLANTING



SAVES BUSHEL SEED PER ACRE  
MAKES EVERY PIECE COUNT  
NO INJURY TO SEED  
NO SPREAD OF DISEASE



SEEDLING  
MACHINE  
WITH SPECIAL  
ATTACHMENT

SEEDLING  
MACHINE  
WITH SPECIAL  
ATTACHMENT  
FOR FERTILIZER  
AND BUSHY  
PLANTING FOR ACRE



IF NOT HANDLED BY YOUR LOCAL DEALER, WRITE US FOR  
NEAREST ADDRESS WHERE TOOLS CAN BE SEEN AND EXAMINED.



John Klein's Bateman Mfg Co. Collection



## “Saving at the Spigot, Wasting at the Bunghole”

**T**HIS old saying is just as true to-day as ever and it applies to most farm operations, in this particular case to potato planting. Which do you prefer, a small saving in labor now and a large waste in material and labor and greatly lessened yield later or a little extra labor and expense now, no waste of seed and fertilizer now or labor later, and then at harvest time the greatest possible yield the conditions will warrant? It doesn't seem that there could be but one answer.

The U. S. Dept. of Agriculture has found by systemic investigation that on the average a man can plant potatoes

*By machine 1 man 2 horses 5.48 acres*

*By machine 2 men 2 horses 4.91 acres*

Not much saving in favor of one-man planter is there? Ten acres would take practically two days either way. About the only extra expense for the two-man planter is for the extra man or boy who sits on the back seat and makes

corrections—sees that there is one seed piece in every space and one only—he never gets more than 40 cents per acre and usually 20 cents up. That means on ten acres \$2 to \$4. Not a very great expense, is it?

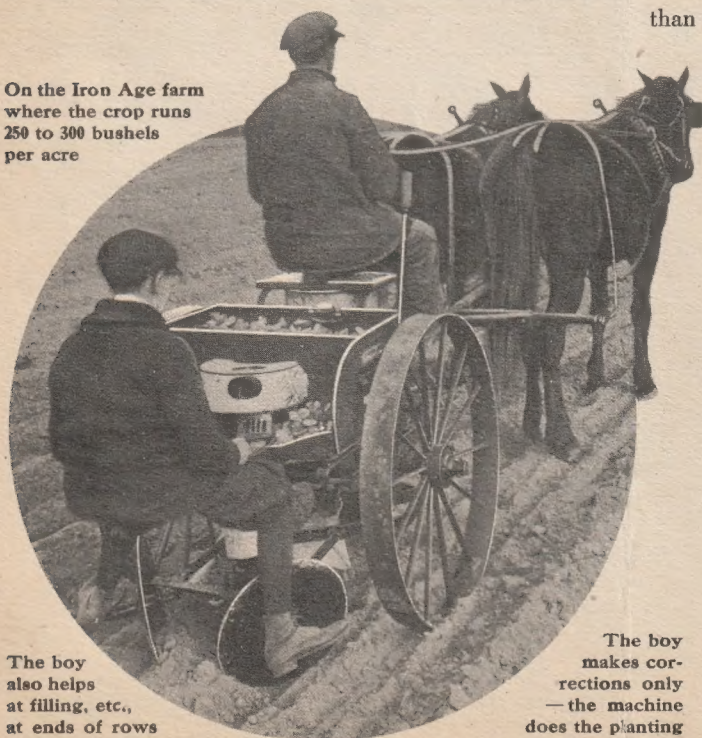
Now see what the benefits are from a two-man planter—a perfect stand, no missing hills, no wasted seed. Do you know that on the average a one-man machine plants 10 bushels to the acre, and a two-man machine 8 to 9 bushels, and in the same proportion, where you use more seed per acre. Ten acres means 10 to 20 bushels seed saved by the two-man planter, enough to pay for your extra man or boy, several times over. Of course where large or whole seed is planted, the proportion of waste is less

Then consider the stand. No one-man machine can plant perfectly—it takes remarkable conditions to make a showing of better than 95% and in average cases not more than 90% of the seed spaces have seed in them, sometimes as low as 80%. A two-man planter does the work 100%. If your one-man planter misses 5% of the hills and your crop averages 150 bushels per acre at say 50 cents per bushel, you lose \$7.50 per acre or \$75, for ten acres. Add cost of wasted seed at \$1 per bushel (a low price) and deduct say \$3 for extra man or boy on two-man planter and you have net loss of \$82 to \$92 on every ten acres planted with a one-man machine. Why do it? Do you still insist on saving that extra man at any price? If not

we want to tell you something about the other advantages of this machine, how it does its work and the different kinds of work it can do. It has been worth while for us to prepare and print this book—we hope it will prove equally profitable for you to read it.

**BATEMAN M'F'G CO.,**  
GRENLOCH, N. J., U. S. A.

On the Iron Age farm where the crop runs 250 to 300 bushels per acre



The boy also helps at filling, etc., at ends of rows

The boy makes corrections only—the machine does the planting



## New Steel Frame Steel Box 100 per cent. Potato Planter

Last year we rebuilt the Planter, yet without changing the style or operation in any way—a steel angle frame in place of the heavy casting and wood bed pieces, separate bearing boxes for feed drive shaft instead of being part of the big cast frame and a steel seed box in place of wood. These changes accomplished several things:

**Lighter Weight** by about 60 pounds—less for the horses to draw. The machine is, as always, in perfect balance.

**Stronger**, although much simpler in construction—nothing can be better than steel angles for the frame—they are practically indestructible.

**Simpler** in construction—allows you to get at all of the working parts easily.

**Cheaply Repaired.** No heavy frame to buy in case of accident and the separate boxes for feed shaft are readily removed.

**More Capacity** for the seed. The New Steel Box measures the same outside but takes up  $\frac{1}{8}$  inch less room, all around, inside. Seed box extension can be furnished. (See pages 4 and 8.)

These points are all gain—nothing is lost in field work. The new machine was thoroughly tested under the most trying conditions all last season and its work is fully up to the following

### *Iron Age standards:*

Automatic handling of the seed with certainty that necessary corrections will be made.

Every seed piece is placed in the ground at the right distance apart and no two in the same place.

No injury to seed, for pickers are not used.

Uniform depth of planting and covering.

Straight line planting—seed is placed in a groove—easy to cultivate, spray and dig.

Even spacing, from 12 to 24 inches apart in the row. Sows fertilizer at same time, but none where it touches the seed.

Furnished with or without fertilizer distributor.

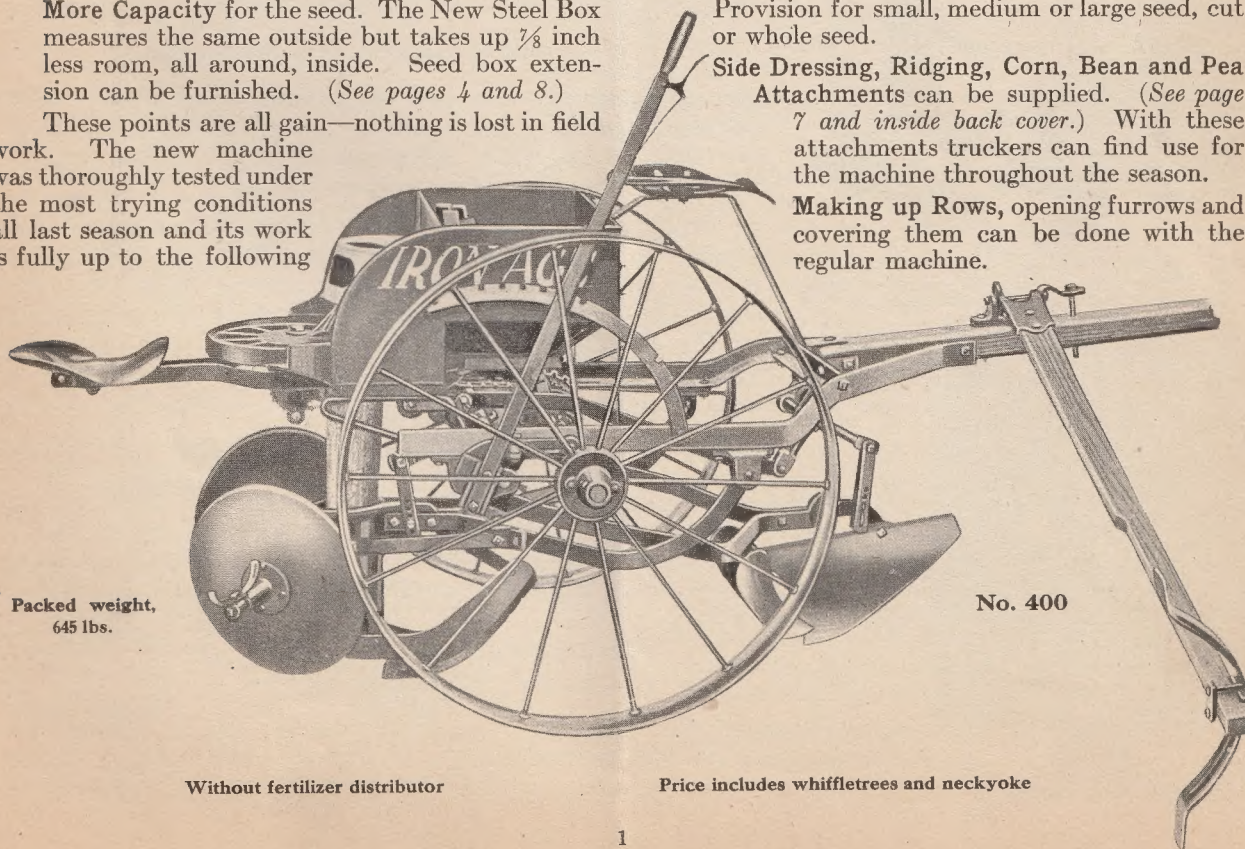
Fertilizer distributor in two sizes—for half or whole sack. (See pages 4-6.)

Four sizes opening plows to choose from. (See page 8.)

Provision for small, medium or large seed, cut or whole seed.

**Side Dressing, Ridging, Corn, Bean and Pea Attachments** can be supplied. (See page 7 and inside back cover.) With these attachments truckers can find use for the machine throughout the season.

**Making up Rows**, opening furrows and covering them can be done with the regular machine.



Packed weight,  
645 lbs.

No. 400

Without fertilizer distributor

Price includes whiffletrees and neckyoke



## Steel Frame Potato Planter

No injury to seed handled in this way. All of this work is automatic

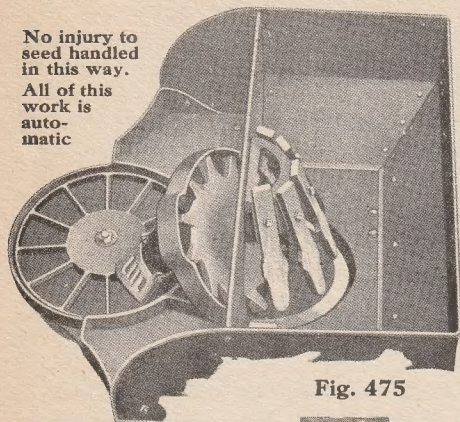


Fig. 475

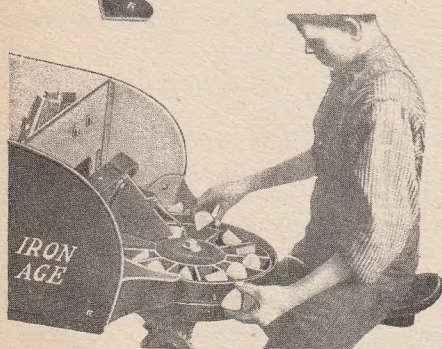


Fig. 186

The only way you can make sure—corrects doubles and misses—earns his way 10 to 20 times. The only hand work on the machine

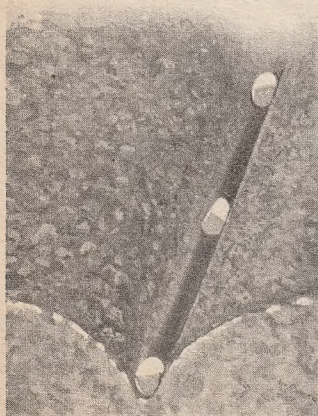


Fig. 187

Potatoes don't roll in this groove. Straight rows, even spacing

It is results that count in potato culture—the net return in dollars and cents. At the same time there is a lot of satisfaction in a clean field with straight rows and *every hill planted*. It is the sign of a practical farmer. The right start is half the race and here it is—an automatic

machine planter that places every seed piece exactly as you want it

without a miss or a double and without injury. The result is, every hill planted at the right depth, the right distance apart and covered level or ridged. No skips to eat up profits nor doubles to waste seed or decrease size of potatoes. Every "Iron Age" Planter saves at least one bushel of seed per acre, sometimes as high as two. That alone will much more than pay the expense of the boy or man on the back seat.

The work is automatic, with an extra seat provided for the boy or man who makes corrections.

The seed is shaken on a loose bottom

between wooden fenders into the pockets of an elevator wheel and then, through a short spout, to corresponding pockets in the feed wheel. (Fig. 475.) There are no pickers to stab the seed pieces and cause them to rot or carry disease.

Here is where the boy has his innings. As the feed wheel revolves he simply takes one seed piece from the pocket where there are two and puts one where there is none. (Fig. 186.) That boy is the "ounce of prevention." He wards off the 5 to 20% loss that other planters cannot avoid. Paying him or a man \$2.00 a day (and you know that's the limit) means a cost of only 40 cents an acre. And that

40 cents brings in a sure return of \$5 to \$50.

Don't take our word for it alone—look for proof—and get it from the man who uses an "Iron Age." Many men think it worth while to do this part of the work themselves. You usually have a boy or extra man anyway, to help fill at ends of rows. The boy does not place the seed—the planter does that and drops it

in a narrow wedge-shaped groove  
in the bottom of the furrow

where it cannot roll. (Fig. 187.) The groove keeps the hills in a straight line, for which you are truly thankful when you cultivate, spray or dig. And remember this—it costs no more to prepare ground, cultivate, and spray a perfect stand.



## Steel Frame Potato Planter

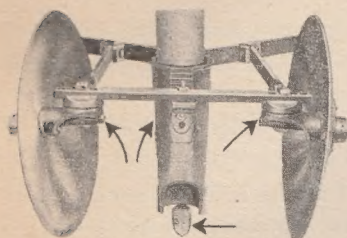


Fig. 326

Adjusts discs at any angle and width and the boot at any depth. See, also, shoe for seed groove

Depth of Planting

The Covering Discs

is the same throughout as set. The depth is regulated by raising or lowering the "boot" which shields the potato tube. The small shoe attached to the bottom of the "boot" makes the groove for the seed. (See Fig. 326.)

are also shown in Fig. 326. They can be set for width, angle and depth. They cover thoroughly from each side, and can ridge the crop, in any shape, if the grower wants it that way. (See also Fig. 266, inside back cover.) Potato seed should be covered properly, or the tubers will be exposed and "greened."

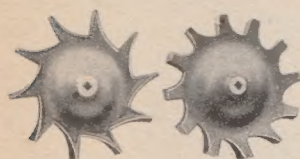


Fig. 329

Two out of three elevator wheels furnished with every planter. These are for large and small seed

For Distance Between Seed

For Different Size Seed

Each planter has six different sprockets, including the one on the machine, (Fig. 480) with which to space seed 12, 14, 15½, 17, 18½ or 20 inches apart. For any one of these we can substitute one that will space the seed 8 inches or one for 24 inches. No. 400 is set up at the factory to space 18½ inches. No. 404 is set up to space 17 inches.

Each planter has three kinds of elevator wheels, including the one on the machine. Two are shown in Fig. 329. On No. 400 they are P180 for small seed, P179 medium, and P181 large. When ordered, we will substitute either P184 for still smaller seed or P183 for larger seed, or both for a like number of regular wheels. On No. 404, the regular wheels are P179 for small seed, P88 medium, and P87 large—special for very small seed, P180; for very large seed, P86.

These numbers are for machines built 1910 and since—other numbers apply for older machines.

The operator must tell by trial which wheel to use. If feeding too fast, use a wheel with smaller sprockets, and so on.



Fig. 480

Extra distance spacing sprockets for seed. Furnished with every planter

One Lever

(Fig. 476), operated from the seat, throws the clutch that shuts off seed and fertilizer, at the same time raising the entire gang clear of the ground. This is good when trying to avoid stone or turning at ends of rows. Note also in this cut, adjustments for working depth of potato shoe and plow. Can be set for dead furrows or "backings."

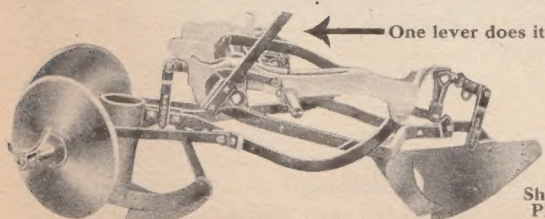


Fig. 476

One lever stops feeding of fertilizer and seed at same time, and raises gang from the ground

The Regular Opening Plow

sent with the planter is known as the shield opening plow (See Fig. 476). It is steel, divides the soil for the plow and warns the driver, when it strikes "fast" rock, to release the lever so the plow will pass over. It will prevent clogging in somewhat trashy ground, but either single flat or double concave discs are provided in place of the shield plow for extreme cases. (See page 8.)

The Main Wheels

are steel with wide, slightly concave rims—interchangeable and have removable ratchet hubs which are cheaply replaced when worn.



## Potato Planter—The New Steel Frame

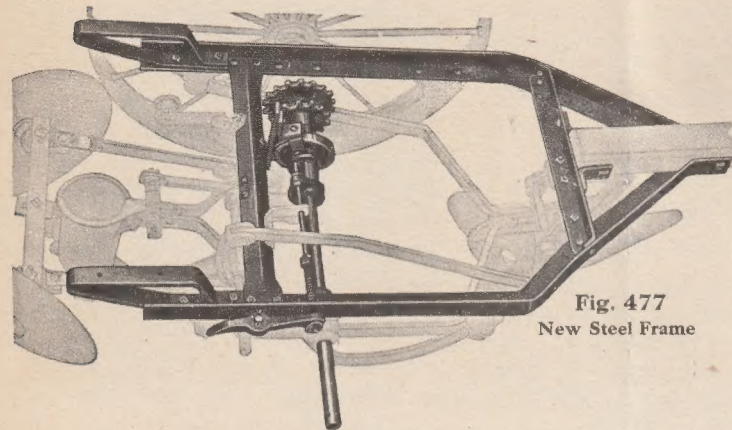
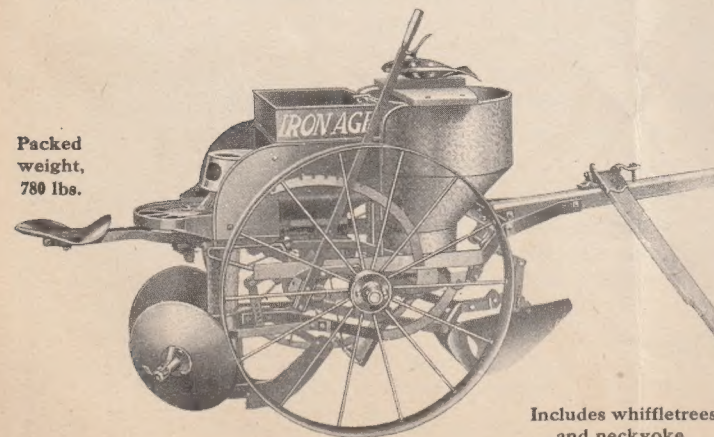


Fig. 477  
New Steel Frame

With Greater Capacity While the majority of men who plant potatoes will not need one larger than No. 400, this larger machine, known as No. 400LE is bound to become very popular with the growers who have 25 to 100 acres or more. Has large size fertilizer can (Fig. 459, page 6), and seed box extension (Fig. 479R, page 8).



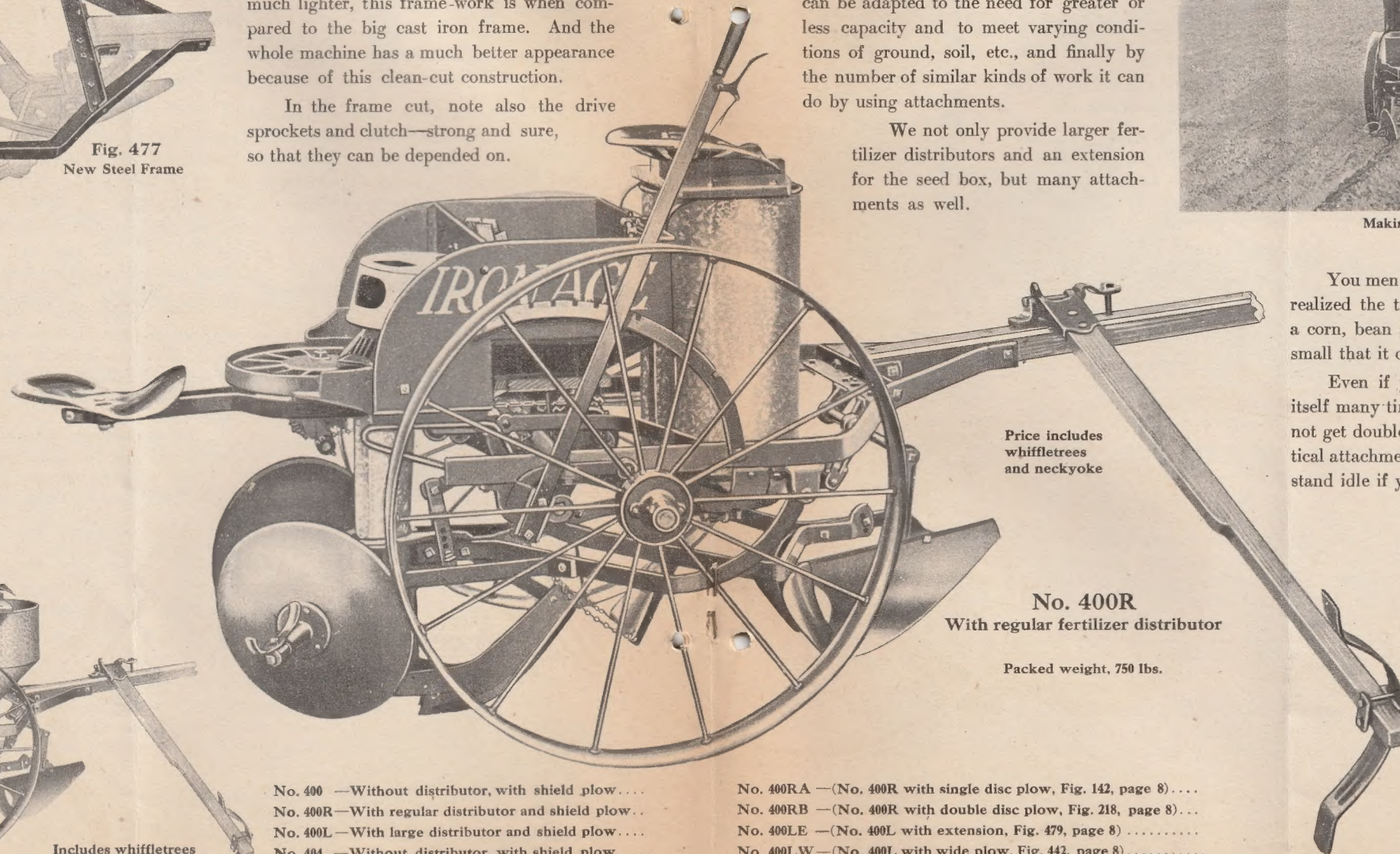
No. 400LE

With large fertilizer distributor and seed box extension.

Includes whiffletrees and neckyoke

Anyone can see how simple this construction is and if you know about angle steel you realize how much stronger, yet very much lighter, this frame-work is when compared to the big cast iron frame. And the whole machine has a much better appearance because of this clean-cut construction.

In the frame cut, note also the drive sprockets and clutch—strong and sure, so that they can be depended on.



Price includes whiffletrees and neckyoke

No. 400R  
With regular fertilizer distributor

Packed weight, 750 lbs.

- No. 400 —Without distributor, with shield plow....
- No. 400R—With regular distributor and shield plow...
- No. 400L—With large distributor and shield plow....
- No. 404 —Without distributor, with shield plow....  
(for large cut seed)
- No. 404R—With regular distributor and shield plow...
- No. 404L—With large distributor and shield plow....

## Many Combinations—Other Uses

A machine's value is determined, first by the way it does the work for which it was made, then by the ways in which it can be adapted to the need for greater or less capacity and to meet varying conditions of ground, soil, etc., and finally by the number of similar kinds of work it can do by using attachments.

We not only provide larger fertilizer distributors and an extension for the seed box, but many attachments as well.



Making up rows for cabbage

You men that have "Iron Age" Planters have not fully realized the true value of your machine, unless you have a corn, bean and pea attachment, and the expense is so small that it does not cost much to find out.

Even if your potato planter, as such, has paid for itself many times over, there is no reason why you should not get double or treble its value by using the many practical attachments. It isn't good judgment to let a machine stand idle if you can keep it going.



Planting corn with the seed attachment.  
Page 7 shows spacing of the grown crop

- No. 400RA —(No. 400R with single disc plow, Fig. 142, page 8)....
- No. 400RB —(No. 400R with double disc plow, Fig. 218, page 8)...
- No. 400LE —(No. 400L with extension, Fig. 479, page 8).....
- No. 400LW —(No. 400L with wide plow, Fig. 442, page 8).....
- No. 400RS —(No. 400R with seed attachment, Fig. 267, page 7)....
- No. 404 is exactly same as No. 400 except that it is fitted for large cut seed, not less than four ounces.



## Two Sizes Fertilizer Attachments

### Our Fertilizer Distributors

have always been very successful. They distribute all kinds of fertilizers thoroughly and without waste. A winged scraper, placed on top of the fertilizer, drops by its own weight as the material feeds from under it. The shaft with its steel cross pins revolves the scraper and keeps an open space in the center—the fertilizer falls light and loose on the cone and is forced to the spreader by a feed wheel. The amount is regulated from the seat by a lever—saves waste when turning at the ends of rows. Two feed wheels are furnished with every planter—the regular P145A, with round points and the star-shaped P145. They will sow from 500 to 3000 pounds per acre, according to your need, the condition of the fertilizer, etc.

### Sows Fertilizer Same Trip

as for planting, but none of it is allowed to touch the seed. The fertilizer is spread in a 6 or 8-inch stream across the furrow, just back of the plow—the seed shoe cuts a groove through this, at the same time mixing the fertilizer and soil thoroughly. The seed drops into the groove where there is no fertilizer. (See Fig. 327.)



Fig. 481  
Chain and three  
extra sprockets  
furnished with  
every fertilizer  
distributor

To  
Further  
Regulate  
Fertilizer,  
we provide  
three extra  
sprockets and extra  
chain, shown in  
Fig. 481. The smaller  
sprockets feed  
faster.

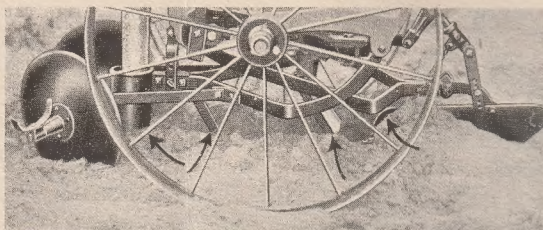


Fig. 327  
From the right note opening plow, fertilizer spreader, seed shoe and potato tube. Fertilizer does not touch seed

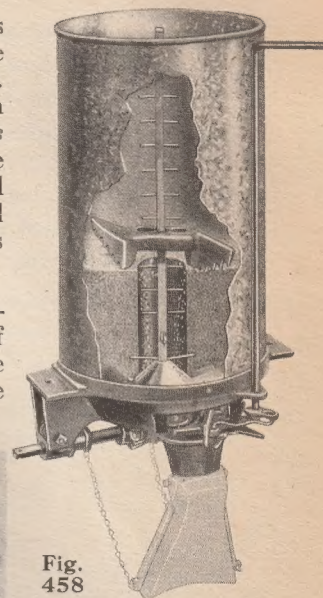


Fig.  
458  
Regular fertilizer distrib-  
utor. Shipped with spread-  
er and chains if for planter  
without any fertilizer at-  
tachment.

If wanted to change old  
style to force feed, sent  
without spreader and chains

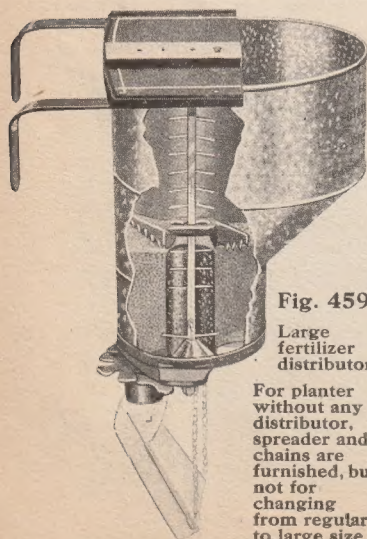


Fig. 459  
Large  
fertilizer  
distributor

For planter  
without any  
distributor,  
spreader and  
chains are  
furnished, but  
not for  
changing  
from regular  
to large size

Fig. 458  
is the  
Regular

Fig. 459  
is Our  
Large  
Size

## The Two Sizes

It is the fertilizer attachment you will get where distributor is specified but no size is given. It holds a trifle over half a sack of fertilizer. Complete machine should be ordered by adding "R" to the number, as No. 400R.

Furnished as an attachment for old or new "Iron Age" Planters. Price, complete for planters that do not have distributors, For parts necessary to change from old style distributor to new force feed, order as Fig. 458C.

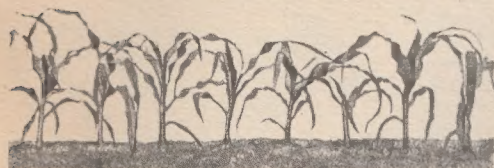
The large size fertilizer attachment holds a full sack. You don't have to stop and fill so often and, in most cases, you can finish your long rows and not have to fill in the middle of the row. It is same in construction as the smaller size. Complete machine with this size should be ordered by adding "L" to the number, as No. 400L.

This size will also be furnished as an attachment for old or new machines. Order as Fig. 459, but please specify whether yours is wood or steel box for seed. Price, complete with spreader and chains for planter without distributor,

Without spreader and chains, if for changing from regular to large size, order as Fig. 459C.



## Corn, Bean and Pea Attachment for Planter



Planted with this seed attachment. Note even spacing

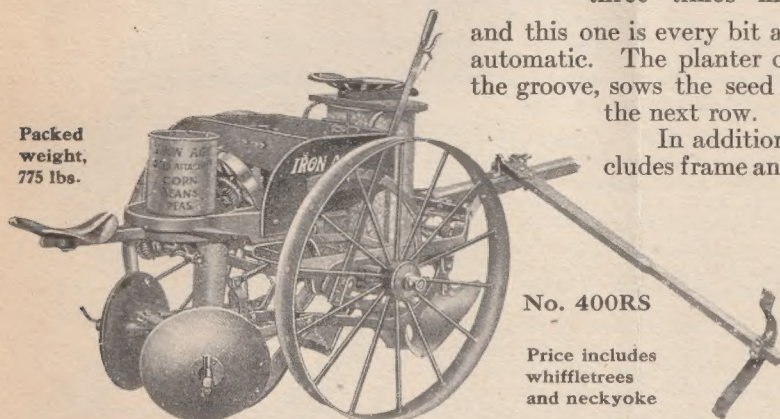
This 100% machine isn't built just for planting potatoes alone. It stands right out in the limelight as a corn, bean or pea planter. The attachment is easily applied in place of the feed wheel. Sows in continuous rows or will drop corn or beans in hills at 12, 14, 15½, 17, 18½ or 20 inches apart. The right amount in a hill, too—never a miss or a whole handful in one place.

The average one-row corn planter costs about three times more than this attachment

and this one is every bit as practical and efficient. The work is all automatic. The planter opens the furrow, spreads fertilizer, makes the groove, sows the seed and covers level or in ridges, also marks the next row.

In addition to the galvanized can the attachment includes frame and adjustable brush which pushes the surplus seed from the openings in the seed plates, an adjustable gate which regulates flow of pea seed, and set of six plates—five for corn and beans and one corrugated plate for peas. Two special seed plates are made for bush lima beans—Price, each. See also Fig. 527 below, showing special attachment for planting bush lima beans—consists of special plow in front and roller at rear which presses them into the ground.

Packed weight, 775 lbs.



No. 400RS

Price includes whiffletrees and neckyoke

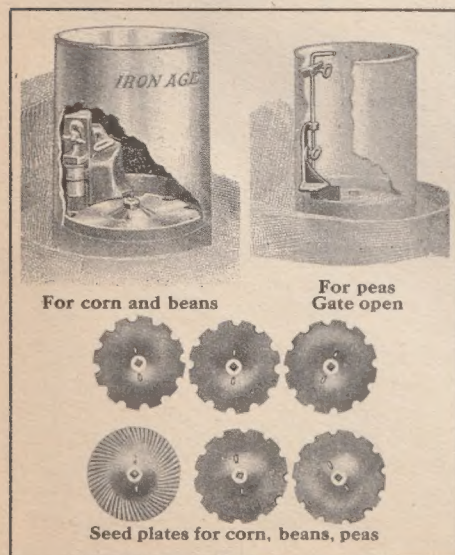
With regular fertilizer distributor and corn, bean and pea attachment

Will fit any "Iron Age" Planter. Price, attachment only, Does not include special seed plates named above.

To Drop Seed Farther Apart use Fig. 296. The plates are the same as those furnished regularly except that alternate holes are plugged and seed can be dropped at 24, 28, 31, 34, 37, or 40 inches apart. They may be ordered in place of those shown in Fig. 267. Or, if wanted in addition to Fig. 267, they cost

By using one of the small extra fertilizer sprockets (Fig. 481, page 6) on the feed wheel shaft, seed can be dropped closer than 12 inches.

Truckers use the seed attachment to sow succession plantings. Dairymen use it to sow fodder corn and also use the planter without the attachment to make up rows for root crops.



For corn and beans

For peas Gate open

Seed plates for corn, beans, peas

Fig. 267  
Corn, bean and pea attachment.

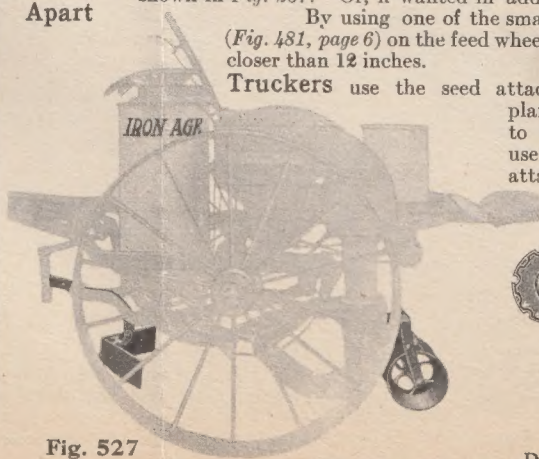


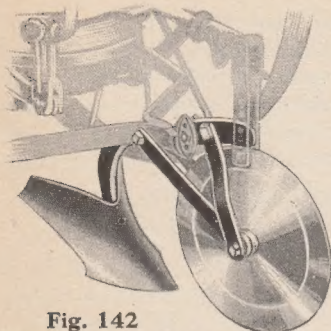
Fig. 527  
Attachment for planting bush lima beans



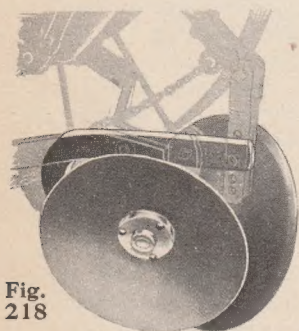
Fig. 296  
Double distance seed plates.



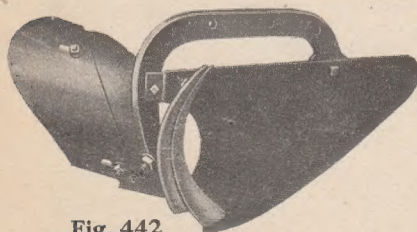
## Other Attachments for Potato Planter



**Fig. 142**  
Single disc opening plow, shown  
by solid parts.



**Fig. 218**  
Double disc opening plow, shown  
by solid parts.



**Fig. 442**  
Wing shield opening plow.



**No. P145**  
Special fertilizer wheel  
— increases amount  
sown.

Four styles of plows are made for opening furrows. The choice is yours and in each case the soil is left loose on each side of the furrow. All of them can be set for depth. The shield opening plow, described on *page 3, Fig. 476*, is usually shipped, because it is best for most kinds of soil. It may be ordered as an attachment including only parts necessary to change from *Fig. 142* or *Fig. 218*.

### The Single Disc Opening Plow

*Fig. 142* is for use in extremely trashy ground and long vines. The disc does better work and eases the draft for the plow. If wanted on new machine, order by adding letter "A" to the number, as No. 400A.

### Double Disc Opening Plows

*Fig. 218*, show up best where cow peas or other growth has been plowed under (as is common in the South). The discs open a path that permits the planter to pass without interference in any way. If wanted on new machine, order by adding letter "B" to the number, as No. 400B.

### Wing Shield Opening Plows

are sometimes needed in light sandy soils so that the extensions will open up wider furrows. This gives more chance for fertilizer to spread across the bottom of the furrow and it is more thoroughly mixed with the soil. It is especially necessary when you put on 1500 pounds or more of fertilizer to the acre. If complete machine is wanted this way, add letter "W" to the number, as No. 400W, and to the price.

With this equipment, *Fig. 478* wide-spreader will be furnished without extra charge. We recommend the wide spreader whenever the wide plow is ordered separate.

### For Smoothing and Leveling Rows

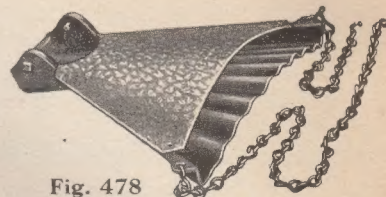
you will find *Fig. 295* well worth the price. It is adjustable for height.

### The Seed Box Extension

increases the capacity one-half. New machines will be furnished with the steel extension by

adding the letter "E" to the number, as No. 400E. Add to the price.

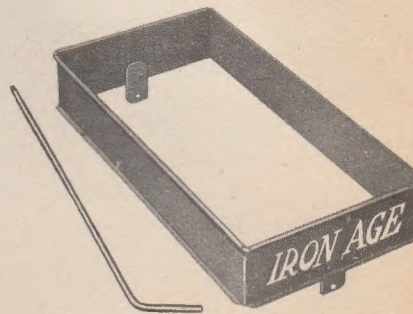
If extension is wanted as an attachment for 1914 or 1915 No. 400 or No. 404 Planters, order *Fig. 479R*. If for any previous year's machine without fertilizer attachment, order *Fig. 460*. If for 1913 planter, with fertilizer attachment, order *Fig. 460R*, (includes rod) If for 1912 and before, with fertilizer attachment, order *Fig. 460RS* (includes rod and set of seat irons).



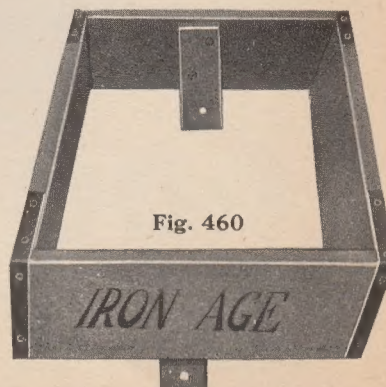
**Fig. 478**  
Special wide spreader.



**Fig. 295**  
Solid parts show leveler.



**Fig. 479R**  
Extension for seed box on 1914 planters.



**Fig. 460**  
Extension for seed box, on wood box  
planters made previous to 1914.





BATEMAN MFG CO.  
GRENLOCH, N.J., U.S.A.

**IRON AGE**

SEVENTY-NINE  
YEARS IN BUSINESS



## Side Dressing and Ridging Attachments for Planter

Solid part  
shows at-  
tachment  
from 1910.

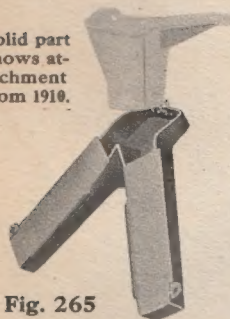


Fig. 265

For  
Side  
Dressing

order Fig. 265, Double Spreader. Puts quick acting fertilizers, such as nitrate of soda, where they will do the most good—on each side of the growing crop. This forces the crop to early maturity, and you can get to market when prices are high. This has become a common practice with market gardeners. The crop is more tender and has a readier sale. Our fertilizer distributor handles nitrate of soda in good shape. The holes at top of spreader will adjust it so that fertilizer will fall in the center and be divided evenly, no matter how much you sow. *For machines built previous to 1910, order Fig. 265S spout with spreader for which you pay, price (complete),*

With Special  
Ridging Attachment



Fig. 266

Solid parts show special ridging attachment for  
working astride rows

Fig. 266, you can ridge your potatoes at the same time you are side-dressing the plants. Many growers in Maine and elsewhere find this necessary. The attachment can be furnished for any "Iron Age" Planter. Potato tube and boot are removed when using the ridger.

About an hour and a half per acre is all that is necessary to side-dress and ridge. Below we show the machine in operation in Maine.

Your conditions may not demand it but every progressive grower aims to better his productions with as little work as possible, and he does not hesitate to change his method where there is reasonable chance of improvement.

There is considerable point in two applications of fertilizer so that there will be no loss in taking up the nitrogen.



"IRON AGE" (Improved Robbins) Planter making second application of fertilizer,  
covering it and ridging the potatoes at the same time



# IRON AGE



PLANTING IN IRON PORES IN ALABAMA



WINDMILLING POTATOES IN THE "GARDEN STATE"



IN THE  
OF THE  
VALLEY OF  
COLORADO



PLANTING IN  
NEW ZEALAND



FROM THE HOUSE OF  
WEST VIRGINIA



FROM THE  
POTATO WAGON  
IN WASHINGTON  
STATE  
PLANTING IN  
ALASKA



FROM THE  
POTATO WAGON



PLANTING IN THE  
NEW ZEALAND COUNTRY

PROPERTY OF JASON A. B.